
PART Q
CONTROL OF HAZARDOUS ENERGY (LOCKOUT-TAGOUT)

WAC		Page
296-307-320	Control of hazardous energy (lockout-tagout).	1
296-307-32001	What does this section cover?	1
296-307-32003	When does this section not apply?	2
296-307-32005	What definitions apply to this section?	2
296-307-32007	What are the required elements of an energy control program?	3
296-307-32009	How does an employer determine when to use lockout vs. tagout?	4
296-307-32011	What requirements must be met to substitute tagout for lockout?	4
296-307-32013	What are the required elements of energy control procedures?	4
296-307-32015	What requirements apply to lockout and tagout devices and materials?	5
296-307-32017	How often must the energy control procedure be inspected?	6
296-307-32019	What general requirements apply to energy control program training and communication?	6
296-307-32021	What additional requirements apply to tagout training and communication?	7
296-307-32023	What requirements apply to employee retraining?	7
296-307-32025	What training records must an employer keep?	7
296-307-32027	Who may perform lockout or tagout?	7
296-307-32029	Who must be notified of lockout and tagout?	8
296-307-32031	What order of events must lockout or tagout procedures follow?	8
296-307-32033	What order of events must be followed to remove lockout or tagout devices?	9
296-307-32035	What requirements apply to testing and positioning machines and equipment?	9
296-307-32037	What requirements apply to outside servicing contractors?	10
296-307-32039	What requirements apply to group lockout or tagout?	10
296-307-32041	What requirements apply to lockout/tagout during shift changes?	10

WAC 296-307-320 Control of hazardous energy (lockout-tagout).

[Recodified as § 296-307-320. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-320, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32001 What does this section cover?

- (1) WAC 296-307-320 covers the servicing and maintenance of machines and equipment in which the unexpected start up of the machine or equipment or release of stored energy could cause injury to employees. This standard establishes minimum performance requirements for the control of such hazardous energy.
- (2) Normal production operations are not covered by this standard. Servicing and/or maintenance that takes place during normal production operations is covered by this standard only if:
 - (a) An employee is required to remove or bypass a guard or other safety device; or
 - (b) An employee is required to place a body part into a point of operation or where an associated danger zone exists during a machine operating cycle.

Exception: Minor servicing activities, that take place during normal production operations, are not covered by this standard if they are routine, repetitive, and integral to the use of the equipment for production, provided that the work is performed using alternative measures that provide effective protection.

[Recodified as § 296-307-32001. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 97-08-051A, § 296-306A-32001, filed 3/31/97, effective 5/1/97; 96-22-048, § 296-306A-32001, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32003 When does this section not apply?

- (1) WAC 296-307-320 does not apply to work on cord and plug connected electric equipment when:
 - (a) Unexpected energization or start up of the equipment is controlled by unplugging the equipment from the energy source; and
 - (b) The plug is under the exclusive control of the employee performing the servicing or maintenance.
- (2) WAC 296-307-320 does not apply to hot tap operations involving transmission and distribution systems for substances such as gas, steam, water, or petroleum products when they are performed on pressurized pipelines, when:
 - (a) Continuity of service is essential;
 - (b) Shutdown of the system is impractical; and
 - (c) Documented procedures are followed, and special equipment is used that will provide proven effective protection for employees.

- (3) WAC 296-307-320 does not cover exposure to electrical hazards from work on, near, or with conductors or equipment in electric utilization installations. These hazards are covered in chapter 296-307 WAC Part T.

[Statutory Authority: Chapter 49.17.040 RCW. 98-24-096 (Order 98-13), § 296-307-32003, filed 12/01/98, effective 03/01/99. [Recodified as § 296-307-32003. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32003, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32005 What definitions apply to this section?

“Affected employee” means an employee who uses a machine or equipment while it is serviced or maintained under lockout or tagout, or who works where such servicing or maintenance is being performed.

“Authorized employee” means a person who locks out or tags out machines or equipment in order to perform servicing or maintenance on that machine or equipment. An affected employee becomes an authorized employee when that employee’s duties include performing servicing or maintenance covered under this part.

“Capable of being locked out” means an energy isolating device that has a hasp or other means for a lock to be affixed, or has a locking mechanism built into it. It also means that the device can be locked out without dismantling, rebuilding, or replacing the energy isolating device or permanently altering its energy control capability.

“Energized” means connected to an energy source or containing residual or stored energy.

“Energy isolating device” means a mechanical device that physically prevents the transmission or release of energy, including but not limited to the following:

- A manually operated electrical circuit breaker;
- A disconnect switch;
- A manually operated switch with conductors of circuit that can be disconnected from all ungrounded supply conductors and allows no pole to operate independently;
- A line valve;
- A block; and
- Any similar device used to block or isolate energy.

Push buttons, selector switches, and other control circuit devices are not energy isolating devices.

WAC 296-307-32005 (Cont.)

“Energy source” means any source of electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other energy, including gravity.

“Hot tap” means a procedure used in repair, maintenance, and service activities that involves welding on a piece of equipment (pipelines, vessels, or tanks) under pressure, in order to install connections or accessories. It is commonly used to replace or add sections of pipeline without the interruption of service for air, gas, water, steam, and petrochemical distribution systems.

“Lockout” means placing a lockout device on an energy isolating device, in accordance with an established procedure, to ensure that the energy isolating device and the equipment being controlled cannot be operated until the lockout device is removed.

“Lockout device” means a device with a positive means such as a lock (key or combination type) to hold an energy isolating device in the safe position and prevents the energizing of a machine or equipment. Blank flanges and bolted slip blinds are included.

“Normal production operations” means using a machine or equipment for its intended production function.

“Servicing and/or maintenance” means workplace activities such as constructing, installing, setting up, adjusting, inspecting, modifying, and maintaining and/or servicing machines or equipment. These activities include lubrication, cleaning, or unjamming of machines or equipment and making adjustments or tool changes, where the employee may be exposed to the unexpected energization or start up of the equipment or release of hazardous energy.

“Setting up” means any work performed to prepare a machine or equipment to perform its normal production operation.

“Tagout” means placing a tagout device on an energy isolating device, according to an established procedure, to indicate that the energy isolating device and the equipment being controlled must not be operated until the tagout device is removed.

“Tagout device” means a prominent warning device, such as a tag and attachment, that can be securely fastened to an energy isolating device according to an established procedure, to indicate that the energy isolating device and the equipment being controlled must not be operated until the tagout device is removed.

[Recodified as § 296-307-32005. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32005, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32007 What are the required elements of an energy control program? You must establish a written energy control program consisting of:

- An energy control procedure;
- Employee training; and
- Periodic inspections.

The purpose of the program is to ensure that before any employee services or maintains a machine or equipment where the unexpected energizing, start up, or release of stored energy could occur and cause injury, the machine or equipment is isolated from the energy source, and rendered inoperative.

[Recodified as § 296-307-32007. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32007, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32009 How does an employer determine when to use lockout vs. tagout?

- (1) If an energy isolating device is not capable of being locked out, your energy control program must use a tagout system.
- (2) If an energy isolating device is capable of being locked out, your energy control program must use lockout unless a tagout system will provide full employee protection according to WAC 296-307-32011.
- (3) Whenever major replacement or major repair, renovation, or modification of a machine or equipment is performed, and whenever new machines or equipment are installed, energy isolating devices for such machines or equipment must be designed to accept a lockout device.

[Statutory Authority: Chapter 49.17.040 RCW. 98-24-096 (Order 98-13), § 296-307-32009, filed 12/01/98, effective 03/01/99. [Recodified as § 296-307-32009. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32009, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32011 What requirements must be met to substitute tagout for lockout?

- (1) You must ensure that when a tagout device is used on an energy isolating device that is capable of being locked out, the tagout device is attached at the same location that the lockout device would have been attached. You must also ensure that the tagout program will provide safety that is equivalent to a lockout program.
- (2) To demonstrate that a tagout program provides safety that is equivalent to a lockout program, you must demonstrate full compliance with all tagout requirements and any other measures necessary to provide equivalent safety. Other measures include:
 - (a) Implementing additional safety measures such as the removal of an isolating circuit element;
 - (b) Blocking a controlling switch;
 - (c) Opening an extra disconnecting device; or
 - (d) Removing a valve handle to reduce the likelihood of inadvertent energization.

[Recodified as § 296-307-32011. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32011, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32013 What are the required elements of energy control procedures?

- (1) You must develop, document, and use procedures to control potentially hazardous energy when employees are engaged in activities covered by this section.

Exception: You are exempt from documenting procedures for a particular machine or equipment only when all of the following elements exist:

- (a) The machine or equipment has no potential for stored or residual energy or reaccumulation of stored energy after shut down that could endanger employees;
- (b) The machine or equipment has a single energy source that can be readily identified and isolated;
- (c) The isolation and locking out of that energy source will completely deenergize and deactivate the machine or equipment;
- (d) The machine or equipment is isolated from that energy source and locked out during servicing or maintenance;

WAC 296-307-32013 (Cont.)

- (e) A single lockout device will achieve lockout;
 - (f) The lockout device is under the exclusive control of the authorized employee performing the servicing or maintenance;
 - (g) The servicing or maintenance does not create hazards for other employees; and
 - (h) The worksite has experienced no accidents involving the unexpected activation or reenergization of the machine or equipment during servicing or maintenance.
- (2) The procedures must clearly and specifically outline the scope, purpose, authorization, rules, and techniques for the control of hazardous energy, and the means to enforce compliance including, but not limited to, the following:
- (a) A specific statement of the intended use of the procedure;
 - (b) Specific procedural steps for shutting down, isolating, blocking, and securing machines or equipment to control hazardous energy;
 - (c) Specific procedural steps for the placement, removal, and transfer of lockout devices or tagout devices and the responsibility for them; and
 - (d) Specific requirements for testing a machine or equipment to determine and verify the effectiveness of lockout devices, tagout devices, and other energy control measures.

[Recodified as § 296-307-32013. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32013, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32015 What requirements apply to lockout and tagout devices and materials?

- (1) You must provide locks, tags, chains, wedges, key blocks, adapter pins, self-locking fasteners, or other hardware for isolating, securing, or blocking machines or equipment from energy sources.
- (2) Lockout and tagout devices must be singularly identified; must be the only device(s) used for controlling energy; must not be used for other purposes.
- (3) Lockout and tagout devices must be durable and meet the following requirements:
 - (a) Lockout and tagout devices must be able to withstand the environment to which they are exposed for the maximum period of time that exposure is expected.
 - (b) Tagout devices must be constructed and printed so that exposure to weather conditions or wet and damp locations will not deteriorate the tag or make the tag's message illegible.
 - (c) Tags must not deteriorate when used in corrosive environments such as areas where acid and alkali chemicals are handled and stored.
- (4) Lockout and tagout devices must be the same within the facility in at least color, shape, or size. Also, tagout devices must have the same print and format.
- (5) Lockout and tagout devices must be substantial and meet the following requirements:

WAC 296-307-32015 (Cont.)

- (a) Lockout devices must be substantial enough to prevent removal without the use of excessive force or unusual techniques, such as with the use of bolt cutters or other metal cutting tools.
- (b) Tagout devices and their means of attachment must be substantial enough to prevent accidental removal. Tagout device attachment means must be single-use, attachable by hand, self-locking, releasable with an unlocking strength of at least 50 pounds, and having the general design and basic characteristics of being at least equivalent to a one-piece, all-environment-tolerant nylon cable tie.
- (c) Lockout and tagout devices must indicate the name of employee applying the device(s).
- (6) Tagout devices must warn against hazardous conditions if the machine or equipment is energized and must include a message such as: "Do not start," "do not open," "do not close," "do not energize," "do not operate."

[Recodified as § 296-307-32015. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32015, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32017 How often must the energy control procedure be inspected?

- (1) You must conduct an inspection of the energy control procedure at least annually to ensure that the procedure and the requirements of this standard are followed.
 - (a) An authorized employee, other than the one(s) using the energy control procedure, must perform the inspection.
 - (b) The inspection must be conducted to correct any deviations or inadequacies identified.
 - (c) Where lockout is used for energy control, the inspection must include a review, between the inspector and each authorized employee, of that employee's responsibilities under the energy control procedure.
 - (d) Where tagout is used for energy control, the inspection must include a review, between the inspector and each authorized and affected employee, of that employee's responsibilities under the energy control procedure, and the elements of WAC 296-307-32021.
- (2) You must certify that the inspections have been performed. The certification must identify the machine or equipment on which the energy control procedure was being used, the date of the inspection, the employees included in the inspection, and the person performing the inspection.

[Statutory Authority: Chapter 49.17.040 RCW. 98-24-096 (Order 98-13), § 296-307-32017, filed 12/01/98, effective 03/01/99. [Recodified as § 296-307-32017. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32017, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32019 What general requirements apply to energy control program training and communication? You must provide training to ensure that employees understand the purpose and function of the energy control program, and that employees have the knowledge and skills required for the safe application, use, and removal of the energy controls. The training must include the following:

- (1) Each authorized employee must receive training in the recognition of applicable hazardous energy sources, the type and magnitude of the energy available in the workplace, and the methods and means necessary for energy isolation and control.
- (2) Each affected employee must be instructed in the purpose and use of the energy control procedure.

WAC 296-307-32019 (Cont.)

- (3) All other employees who work in an area where energy control procedures must be used, must be instructed about the procedure and the prohibition against attempting to restart or reenergize machines or equipment that are locked out or tagged out.

[Recodified as § 296-307-32019. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32019, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32021 What additional requirements apply to tagout training and communication?

When tagout systems are used, employees must also be trained in the following limitations of tags:

- (1) Tags are warning devices affixed to energy isolating devices, and do not provide the physical restraint on those devices that is provided by a lock.
- (2) When a tag is attached to an energy isolating means, it is not to be removed without approval of the authorized person responsible for it, and it is never to be bypassed, ignored, or otherwise defeated.
- (3) Tags must be legible and understandable by all authorized, affected, and other employees working in the area.
- (4) Tags and their means of attachment must be made of materials that will withstand the environmental conditions encountered in the workplace.
- (5) Tags may create a false sense of security, and their meaning needs to be understood as part of the overall energy control program.
- (6) Tags must be securely attached to energy isolating devices so that they cannot be accidentally detached during use.

[Recodified as § 296-307-32021. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32021, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32023 What requirements apply to employee retraining?

- (1) Authorized and affected employees must be retrained whenever there is a change in job assignments, machines, equipment, or processes that present a new hazard, or when there is a change in the energy control procedures.
- (2) Additional retraining must also be provided whenever an inspection reveals, or whenever you believe, that the employee's knowledge or use of the energy control procedures is inadequate.
- (3) Retraining must reestablish employee proficiency and introduce new or revised control methods and procedures, as necessary.

[Recodified as § 296-307-32023. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32023, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32025 What training records must an employer keep? You must keep records that certify that employee training has been completed and is up to date. The records must contain each employee's name and dates of training.

[Recodified as § 296-307-32025. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32025, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32027 Who may perform lockout or tagout? Lockout or tagout must be performed only by authorized employees performing the service or maintenance.

[Recodified as § 296-307-32027. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32027, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32029 Who must be notified of lockout and tagout? Affected employees must be notified of the application and removal of lockout or tagout devices. Notification must be given before controls are applied and after they are removed.

[Recodified as § 296-307-32029. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32029, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32031 What order of events must lockout or tagout procedures follow? The established lockout or tagout procedures must cover the following elements in the following sequence:

Machinery or equipment shutdown before lockout or tagout:

- (1) Before an authorized or affected employee turns off a machine or equipment, the authorized employee must have knowledge of the type and magnitude of the energy, the hazards of the energy to be controlled, and the method or means to control the energy.
- (2) The machine or equipment must be turned off or shut down using the procedures established for the machine or equipment. The shutdown must be done in the prescribed order to avoid increased hazards to employees.
- (3) All necessary energy isolating devices must be physically located and operated in such a manner as to isolate the machine or equipment from the energy source.

Application of the lockout or tagout device:

- (4) Lockout or tagout devices must be affixed to each energy isolating device by authorized employees.
- (5) Lockout devices, where used, must be affixed in a manner that will hold the energy isolating devices in a “safe” or “off” position.
- (6) Tagout devices, where used, must be affixed in such a manner as will clearly indicate that the operation or movement of energy isolating devices from the “safe” or “off” position is prohibited.
 - (a) Where tagout devices are used with energy isolating devices designed with the capability of being locked, the tag attachment must be fastened at the same point at which the lock would have been attached.
 - (b) Where a tag cannot be affixed directly to the energy isolating device, the tag must be located as close as safely possible to the device, in a position that will be immediately obvious to anyone attempting to operate the device.

Eliminating the hazards of stored energy:

- (7) After applying lockout or tagout devices to energy isolating devices, all potentially hazardous stored or residual energy must be relieved, disconnected, restrained, and otherwise rendered safe.
- (8) If there is a possibility of reaccumulation of stored energy to a hazardous level, verification of isolation must be continued until the servicing or maintenance is completed, or until the possibility of such accumulation no longer exists.

Before beginning service or maintenance:

- (9) Prior to starting work on machines or equipment that have been locked out or tagged out, the authorized employee must verify that the machine or equipment has been isolated and deenergized.

[Recodified as § 296-307-32031. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32031, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32033 What order of events must be followed to remove lockout or tagout devices?

- (1) Before removing lockout or tagout devices, the authorized employee must complete the following procedures:
 - (a) Inspect the work area to ensure that nonessential items have been removed and to ensure that machine or equipment components are operationally intact.
 - (b) Check the work area to ensure that all employees have been safely positioned or removed.
- (2) After lockout or tagout devices have been removed and before a machine or equipment is started, affected employees must be notified that the lockout or tagout device(s) have been removed.
- (3) Each lockout or tagout device must be removed from each energy isolating device by the authorized employee who applied the device.

Exception: When the authorized employee who applied the lockout or tagout device is not available to remove it, that device may be removed under your direction, if specific procedures and training for such removal have been developed, documented, and incorporated into the energy control program.

You must ensure that the specific procedure provides equivalent safety to the removal of the device by the authorized employee who applied it. The specific procedure must include at least the following elements:

- (a) Verification by the employer that the authorized employee who applied the device is not at the facility;
- (b) Making all reasonable efforts to inform the authorized employee that the lockout or tagout device has been removed; and
- (c) Ensuring that the authorized employee has this knowledge before resuming work at that facility.

[Recodified as § 296-307-32033. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32033, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32035 What requirements apply to testing and positioning machines and equipment? When lockout or tagout devices must be temporarily removed from the energy isolating device and the machine or equipment energized to test or position the machine or equipment, the following sequence of actions must be followed:

- (1) Clear the machine or equipment of tools and materials according to WAC 296-307-32033 (1)(a).
- (2) Remove employees from the machine or equipment area according to WAC 296-307-32033 (1)(b).
- (3) Remove the lockout or tagout devices as specified in WAC 296-307-32033(3).
- (4) Energize and proceed with testing or positioning.
- (5) Deenergize all systems and reapply energy control measures in accordance with WAC 296-307-32031 to continue the servicing and/or maintenance.

[Statutory Authority: Chapter 49.17.040 RCW. 98-24-096 (Order 98-13), § 296-307-32035, filed 12/01/98, effective 03/01/99. [Recodified as § 296-307-32035. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32035, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32037 What requirements apply to outside servicing contractors?

- (1) Whenever outside servicing contractors are to be engaged in activities covered by this standard, you and the outside employer must inform each other of your respective lockout or tagout procedures.
- (2) The outside employer must ensure that employees understand and comply with the restrictions and prohibitions of your energy control program.

[Recodified as § 296-307-32037. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32037, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32039 What requirements apply to group lockout or tagout?

- (1) When servicing and/or maintenance is performed by a crew or other group, they must use a procedure that provides a level of protection equivalent to that provided by the implementation of a personal lockout or tagout device.
- (2) Group lockout or tagout devices must be used according to the procedures required by WAC 296-307-32013 including, but not limited to, the following:
 - (a) An authorized employee has primary responsibility for a set number of employees working under the protection of a group lockout or tagout device (such as an operations lock); and
 - (b) A method for the authorized employee to determine if individual group members are exposed to release of stored energy hazards; and
 - (c) When more than one crew or group is involved, assignment of overall lockout or tagout control responsibility to an authorized employee designated to coordinate individual group members and ensure continuity of protection; and
 - (d) Each authorized employee must affix a personal lockout or tagout device to the group lockout device when beginning work, and must remove those devices when the work is complete.

[Statutory Authority: Chapter 49.17.040 RCW. 98-24-096 (Order 98-13), § 296-307-32039, filed 12/01/98, effective 03/01/99. [Recodified as § 296-307-32039. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32039, filed 10/31/96, effective 12/1/96.]

WAC 296-307-32041 What requirements apply to lockout/tagout during shift changes? During shift or personnel changes, you must ensure that employees follow specific procedures to ensure the continuity of lockout or tagout protection. The procedures must include orderly transfer of lockout or tagout protection between off-going and oncoming employees, to minimize exposure to hazards from the unexpected energization or start-up of the machine or equipment, or release of stored energy.

[Recodified as § 296-307-32041. 97-09-013, filed 4/7/97, effective 4/7/97. Statutory Authority: RCW 49.17.040, [49.17.]050 and [49.17.]060. 96-22-048, § 296-306A-32041, filed 10/31/96, effective 12/1/96.]